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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,940	04/21/2004	George Nicholas Bullen	NORT 54565	7171

7590 06/26/2006

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One Oxford Centre, 38th Floor  
301 Grant Street  
Pittsburgh, PA 15219

EXAMINER

JONES, DAVID B

ART UNIT	PAPER NUMBER
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3725

DATE MAILED: 06/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/828,940	<b>Applicant(s)</b> BULLEN, GEORGE NICHOLAS	
	<b>Examiner</b> David B. Jones	<b>Art Unit</b> 3725	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.  
4a) Of the above claim(s) none is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8, 11, 13-20, 25, 28, 30 and 31 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 9, 10, 12, 21-24, 26, 27, and 29 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/17/2005</u> . | 6) <input type="checkbox"/> Other: ____.  |

### DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 8, 11, 13-20, 25, 28, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonomi et al. Bonomi et al. teaches the claimed invention including a drilling step (Figs. 3-8) and a hole-prepping step (Figs 9-12) before a rivet installation. Therefor Bonomi et al. teaches machining a workpiece (drilled) and then working the machined hole (Figs. 9-12) and finally providing means at R1 and R2 (robots) for automatically aligning the hole-prepping tool (50) with the machined holes of the workpiece. Hence Bonomi et al. teaches the claimed invention excepting the hole prepping being that of a cold working or deforming. Bonomi et al. teaches a rotary tool at 55/56 for prepping the hole. It is well known to drill and coin (or otherwise deform a hole) to finish a hole preparatory for an assembly operation. To have provided the second step of finishing the hole by way of deformation, in lieu of using a rotary tool, would have been to the artisan of ordinary skill but an obvious choice of tooling and desired finishing steps and would have been in view of the known prior art an obvious choice of finishing expedients to be located on the robot arms preparatory for the assembly step.

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2. Claims 6, 7, 9, 10, 12, 21-24, 26, 27, and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

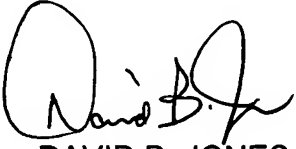
3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David B. JONES whose telephone number is (571) 272-4518.

Any inquiry of a general nature or relating to the status of this application should be directed to telephone number is (571) 272-3700.

In the event that the Applicant(s) wishes to communicate via Fax, the current central Fax number for the patent office is (571) 273-8300

DBJ

  
DAVID B. JONES  
PRIMARY PATENT EXAMINER  
ART UNIT 3725